

WHAT IS CLAIMED IS:

1. A method to modify food having a glycemic index by reducing the glycemic index of the food, the method comprising combining the food with an effective amount of alpha-cyclodextrin.

2. The method according to claim 1, wherein the food is combined with the alpha-cyclodextrin by incorporating the alpha-cyclodextrin into the food during manufacturing of the food.

3. The method according to claim 1, wherein the food is combined with the alpha-cyclodextrin before, together with or after ingestion of the food.

4. The method according to claim 1, wherein the alpha-cyclodextrin is uncomplexed and used in a concentration of 0.1 - 30% (w/w).

5. The method according to claim 1, wherein the alpha-cyclodextrin is complexed and used in a concentration of 3 - 30% (w/w).

6. The method according to claim 5, wherein alpha-cyclodextrin is complexed with digestible or partially indigestible, natural or synthetic oils or fats.

7. The method according to claim 1, wherein the food is destined for consumption by healthy humans or humans suffering from diabetes, prediabetic conditions, metabolic syndrom ("Syndrom X"), overweight, hypertension, hyperlipidemia or other physiological or medical disorders.

8. The method according to claim 1, wherein the food is destined for consumption by pet animals.

9. The method according to claim 8, wherein the food has a fat content of less than 5% by weight.

10. A food having an alpha-cyclodextrin content that causes the food to be useful for the prevention or risk reduction of an ailment selected from the group consisting of hyperlipidemia, hypertension, obesity, atherosclerosis, diabetes, and the manifold pathological consequences of these conditions.

11. A food combined with an effective amount of alpha-cyclodextrin during manufacturing of the food to reduce the glycemic index of the food, wherein the food is selected from the group consisting of bakery products, beverages, cereal and other grain products, dairy products, fats and oils, vegetable and fruit juices, sauces, snacks, soups, liquid meal replacements, and foods for medical purposes.

12. The food according to claim 10, wherein the food contains alpha cyclodextrin in a concentration of 0.1-30% (w/w).

13. The food according to claim 12, wherein the food contains an alpha cyclodextrin concentration of 1-15%.

14. The food according to claim 13, wherein the food has an alpha cyclodextrin concentration of 2-10%.

15. A process for the production of food used to prevent or reduce the risk of an ailment selected from the group consisting of hyperlipidemia, hypertension, obesity, atherosclerosis, diabetes, and the manifold pathological consequences of these conditions, comprising incorporating

alpha-cyclodextrin into the food in a concentration of 0.1-30% (w/w) during manufacture of the food or during preparation of the food.